

Educational Opportunity Disparities in Delaware, 1992–2019

Introduction

For over a quarter century, Delaware has witnessed consistent, sizable educational opportunity disparities for students with low-income status, English-learner status (EL), or disability status and for students who are Black and Hispanic.

This brief uses average test scores from the National Assessment of Educational Progress (NAEP) as measures of educational opportunity. Test scores reflect the educational opportunities to learn that are available to students in their schools and communities. While measuring student outcomes is an important strategy for holding schools and districts accountable for student success, we must understand that disparities in academic

achievement reflect historical and current day structural inequities. Acknowledging structural inequities helps ensure that achievement differences are not

viewed as the result of individual student deficits and instead focuses attention on ensuring that systems are designed for all students to thrive.

For over a quarter century, Delaware has witnessed consistent, sizable educational opportunity disparities for students with low-income status, English-learner status, or disability status and for students who are Black and Hispanic.

Prepared for the Redding Consortium for Educational Equity by the University of Delaware's Institute for Public Administration, in partnership with Delaware State University and KIDS COUNT in Delaware.

Overview

Using data from the National Assessment of Educational Progress (NAEP), this brief provides an overview of Delaware 4th grade reading proficiency and 8th grade math proficiency for all students from 1992 to 2019 and compares Delaware student proficiency with the Mid-Atlantic region and the nation.¹ The brief provides proficiency information for all Delaware students before examining proficiency rates and scores for students by disability status, English-learner status, low-income status, and by different racial and ethnic identities.

NAEP Definitions²

- **Below Basic** indicates a test score below the Basic achievement level for a given grade.
- **Basic** indicates *partial mastery* of the knowledge and skills that are fundamental for proficient work at a given grade.
- **Proficient** indicates *solid academic performance* for the given grade level and competency over challenging subject matter including subject-matter knowledge, application of such knowledge to real world situations, and analytical skills appropriate to the subject matter.
- **Advanced** indicates *superior academic performance* and presumes mastery of both Basic and Proficient levels.

NAEP Achievement Levels

The NAEP achievement levels in the table below indicate the minimum score a student must receive to achieve “basic,” “proficient,” or “advanced.”

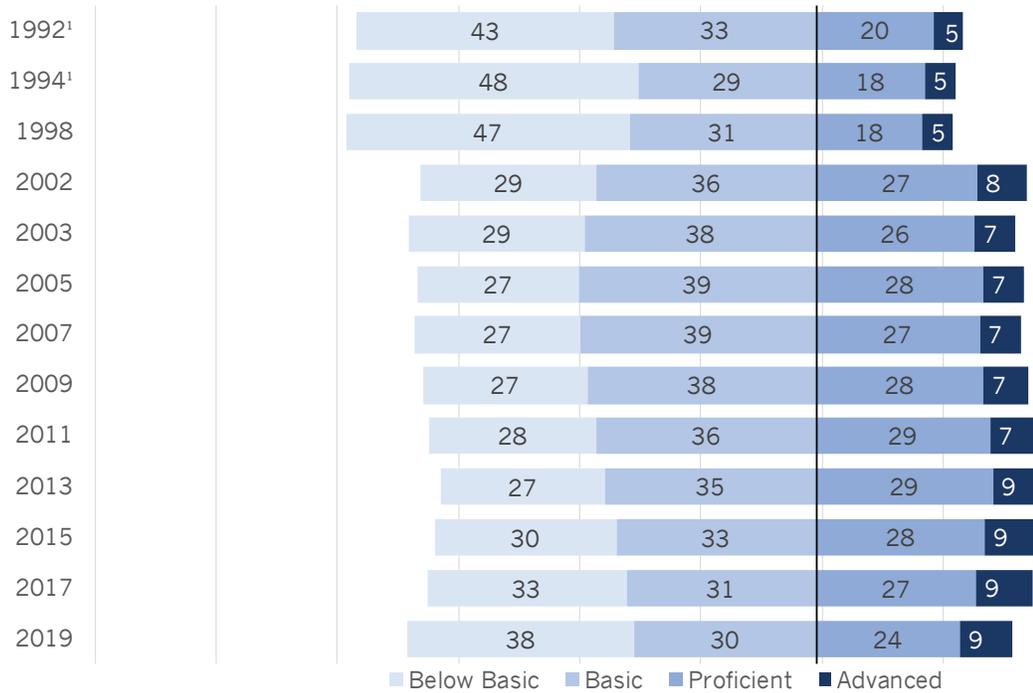
4th Grade Reading	8th Grade Reading	4th Grade Math	8th Grade Math
Basic: 208	Basic: 243	Basic: 214	Basic: 262
Proficient: 238	Proficient: 281	Proficient: 249	Proficient: 299
Advanced: 268	Advanced: 323	Advanced: 282	Advanced: 333

Delaware in Context, All Students

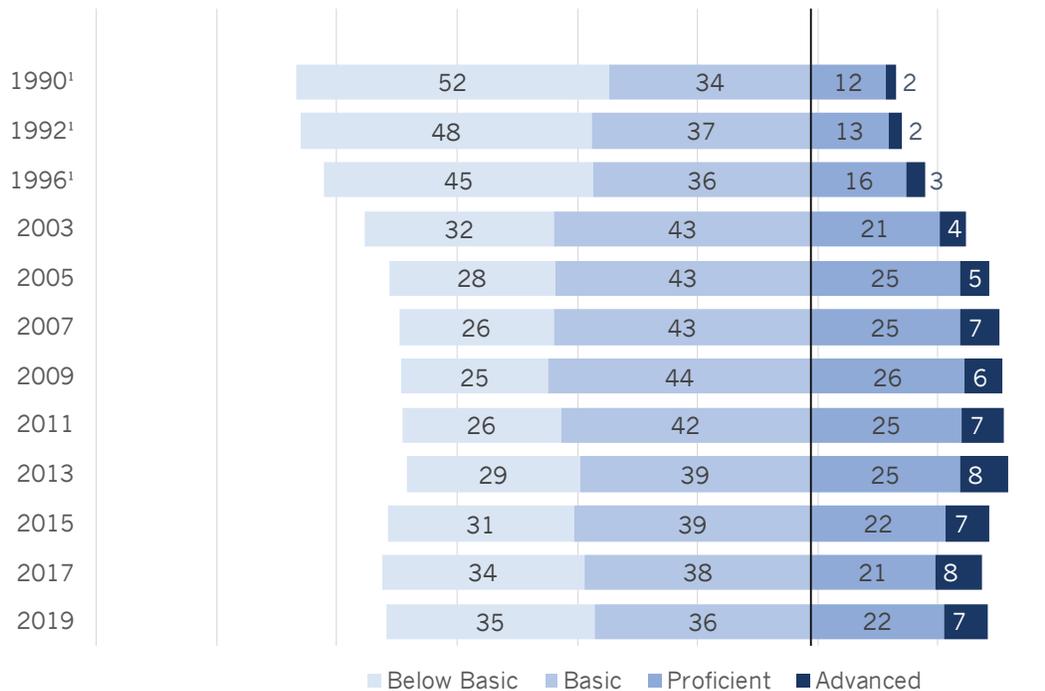
	Year	Delaware	National	Mid-Atlantic ³ States
4th Grade Reading	1992	213	217	218
	2019	218	220	223
8th Grade Math	1990	261	263	266
	2019	277	282	286

Delaware NAEP Scores, 1992–2019*

4th Grade Reading for All Students in Delaware



8th Grade Math for All Students in Delaware



* Average scale scores and percentages at each achievement level
¹ Accommodations were not permitted for this assessment.

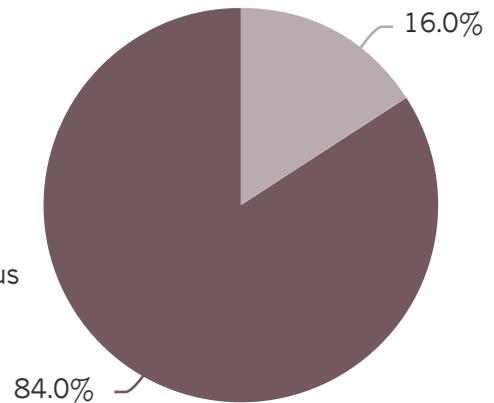
Disability Status

Definition

The category “**students with disabilities**” includes students identified as having either an Individualized Education Program (IEP) or protection under Section 504 of the Rehabilitation Act of 1973.⁴

Disability Status Composition in Delaware, 2019⁵

- Disability Status
- Non Disability Status



Key Takeaways

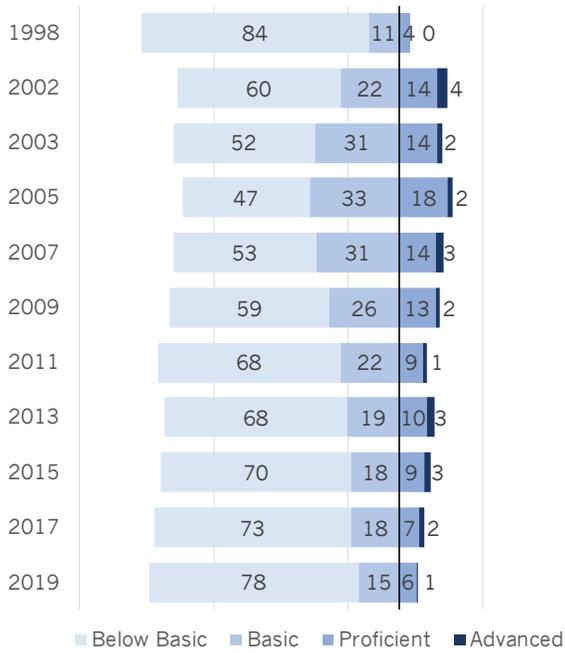
- Proficiency rates for students with a disability are persistently low.
- The achievement disparity between students with a disability and students without a disability has worsened over time.
- Students with a disability in Delaware are performing worse than students with a disability across the nation and surrounding Mid-Atlantic states.

Delaware in Context, by Disability Status

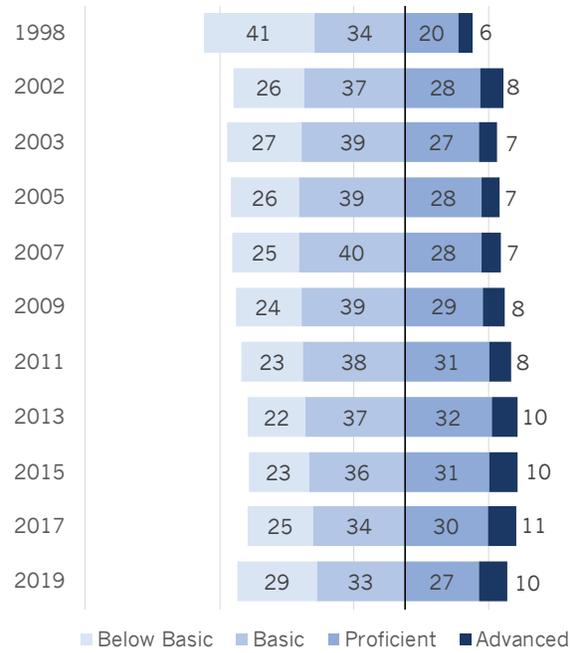
	Year	Disability Status	Delaware	National	Mid-Atlantic States
4th Grade Reading	2003	Yes	205	185	189
		No	225	221	224
	2019	Yes	177	184	191
		No	226	226	229
8th Grade Math	2003	Yes	237	242	246
		No	281	282	284
	2019	Yes	239	247	250
		No	284	287	292

Delaware NAEP Scores, by Disability Status*

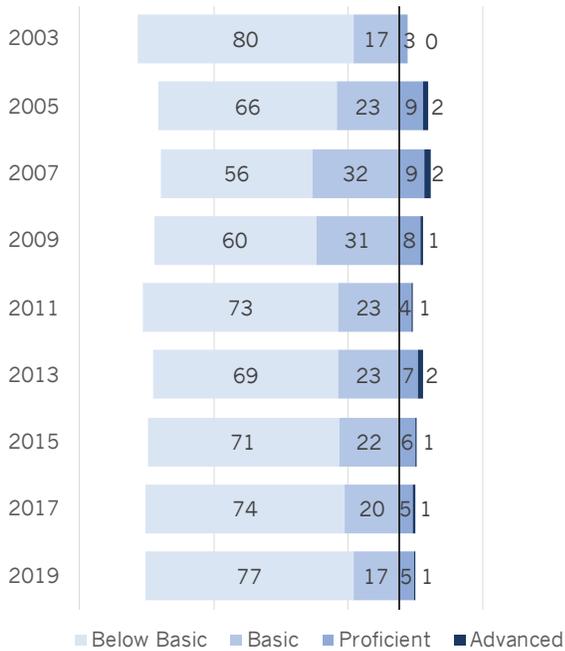
4th Grade Reading with Disability



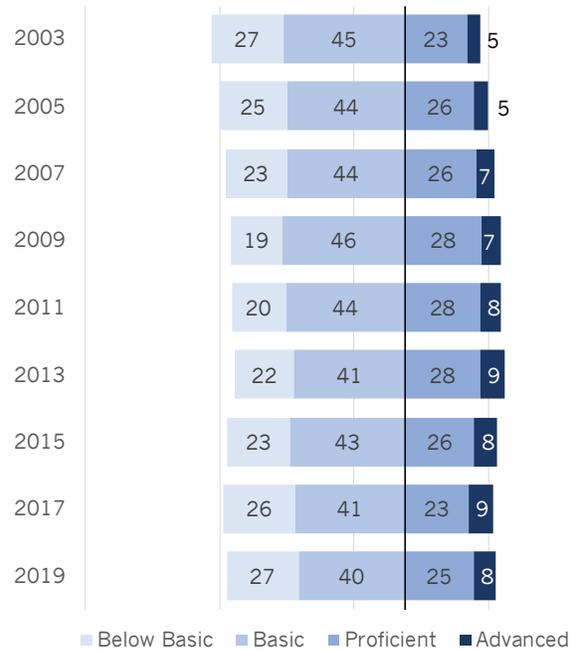
4th Grade Reading without Disability



8th Grade Math with Disability



8th Grade Math without Disability



* Average scale scores and percentages at each achievement level

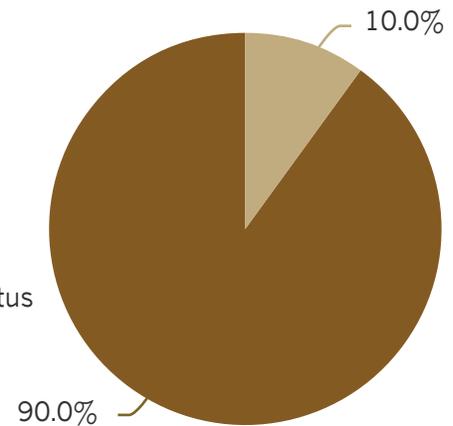
English Language Status

Definition

The category “**English learner**” (EL) includes students who are in the process of acquiring English language skills and knowledge.⁶

English Language Composition in Delaware, 2019

- English Learner Status
- Non English Learner Status



Key Takeaways

- Proficiency rates for EL students are persistently low.
- The achievement disparity between EL students and non-EL students has not changed over time.
- English Learner students in Delaware are performing better than EL students across the nation and surrounding Mid-Atlantic states.

Delaware in Context, by English Learner Status

	Year	English Learner Status	Delaware	National	Mid-Atlantic States*
4th Grade Reading	2009	Yes	201	188	194
		No	226	224	227
	2019	Yes	201	191	187
		No	221	224	227
8th Grade Math	2009	Yes	N/A [^]	243	248
		No	284	285	291
	2019	Yes	236	243	231
		No	278	285	288

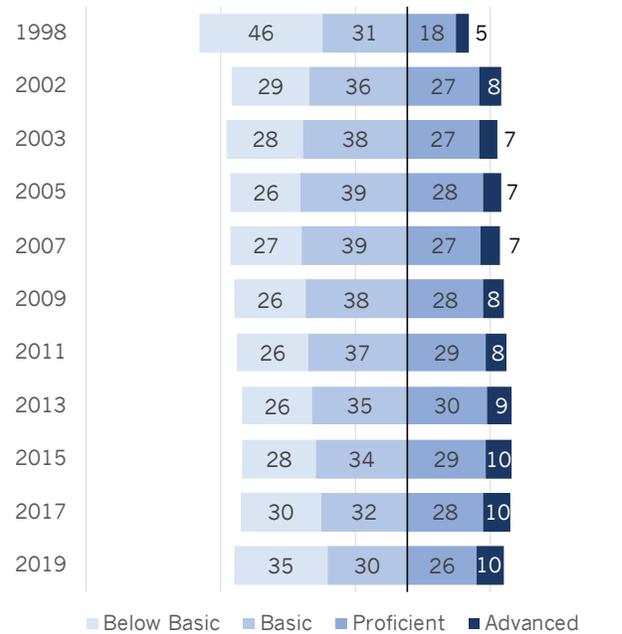
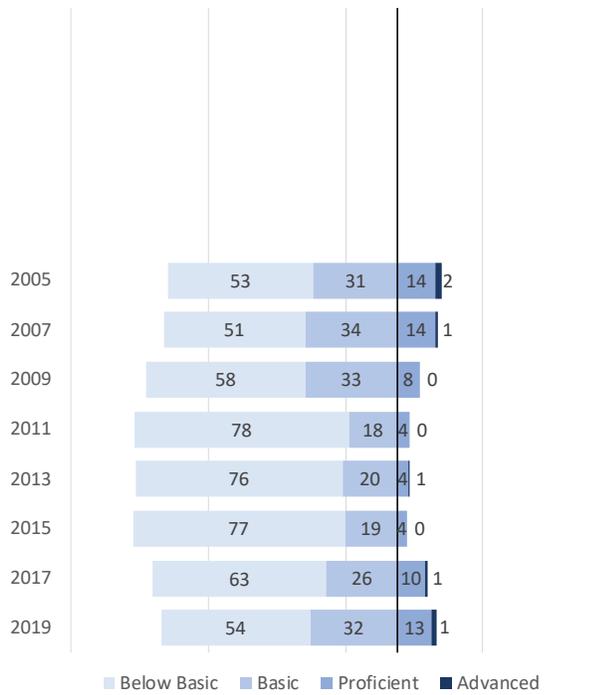
* New Jersey data not available for 4th Grade Reading in 2009

[^]Not enough data available for Delaware 8th Grade Math EL Students

Delaware NAEP Scores, by English Learner (EL) Status*

4th Grade Reading *with EL Status*

4th Grade Reading *without EL Status*



* Average scale scores and percentages at each achievement level; There is not enough data available to compare EL and non-EL Status math scores in chart format.

1 Accommodations were not permitted for this assessment.

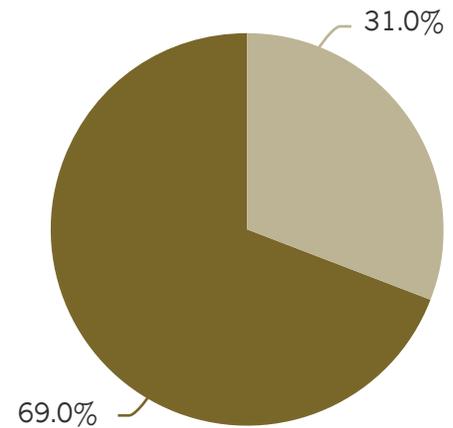
Low-income Status

Definition

The category “**low-income**” indicates that the student is eligible for the free/reduced-price school lunch and/or a student who receive any one of the following benefits: TANF or SNAP.⁷

Low-income Status Composition in Delaware, 2019

- Low-Income Status
- Non-Low-Income Status



Key Takeaways

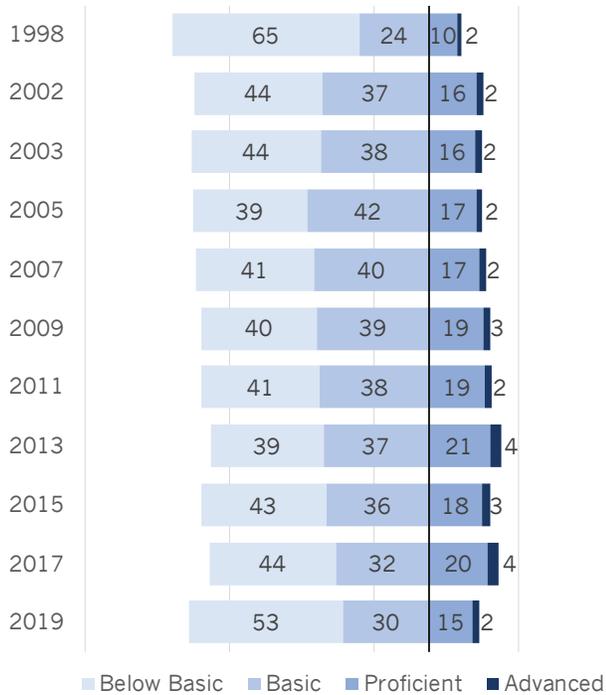
- Proficiency rates for low-income students have remained low, but rates have improved over time.
- The achievement disparity between low-income students and non-low-income students is large and unchanging.
- Low-income students in Delaware are performing at similar rates compared to low-income students across the nation and surrounding Mid-Atlantic states.
- Non-low-income students in Delaware are performing worse than non-low-income students across the nation and surrounding Mid-Atlantic states.

Delaware in Context, by Low-income Status

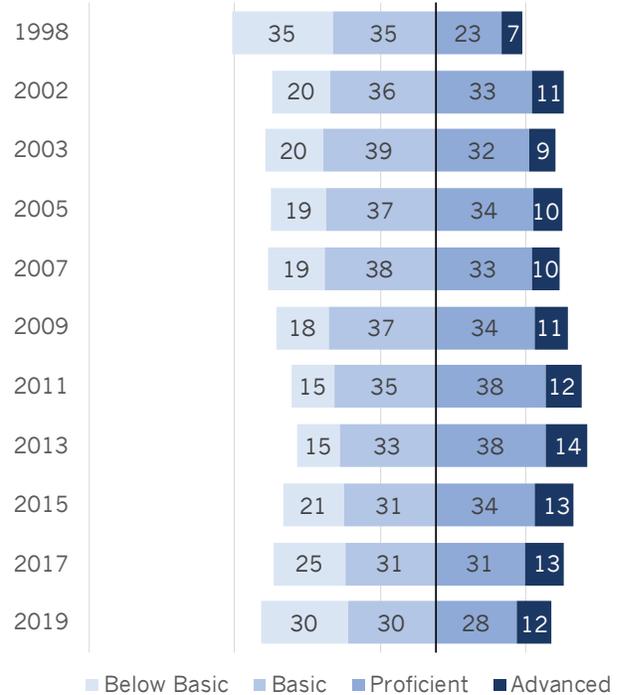
	Year	Low-Income Status	Delaware	National	Mid-Atlantic States
4th Grade Reading	2003	Yes	212	201	200
		No	231	229	232
	2019	Yes	202	207	207
		No	225	235	238
8th Grade Math	2003	Yes	261	259	256
		No	285	287	288
	2019	Yes	259	266	264
		No	284	296	300

Delaware NAEP Scores, by Low-income Status*

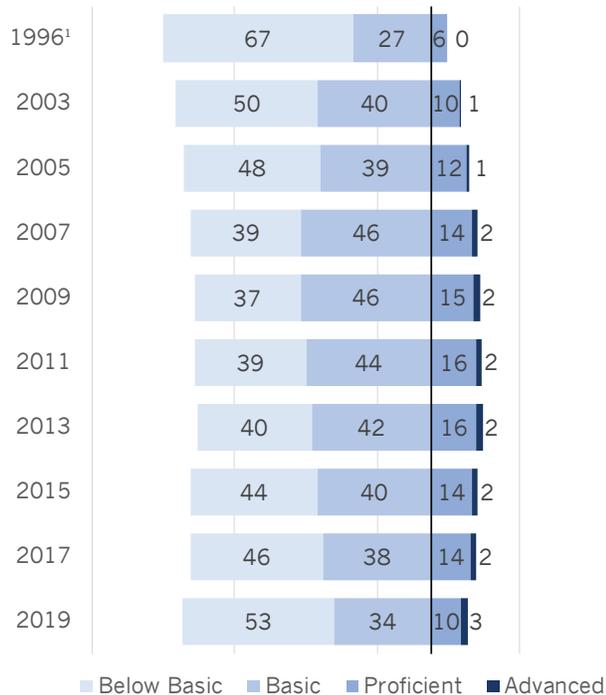
4th Grade Reading *with* Low-income Status



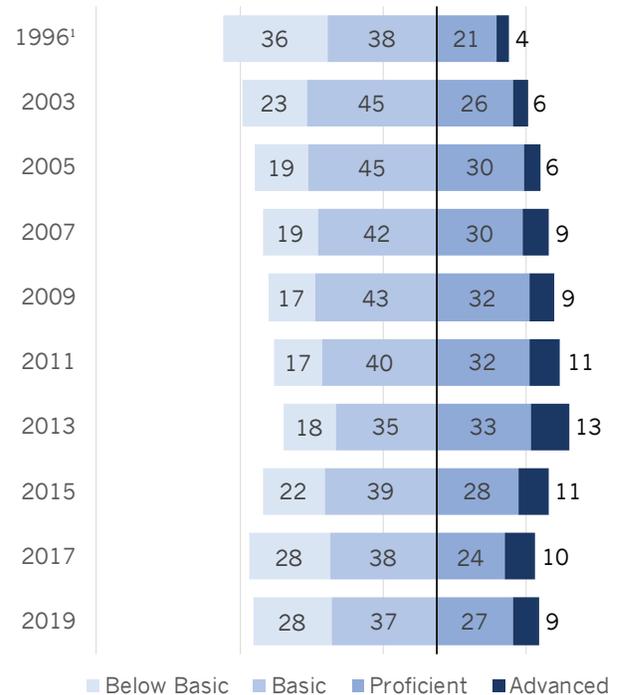
4th Grade Reading *without* Low-income Status



8th Grade Math *with* Low-income Status



8th Grade Math *without* Low-income Status



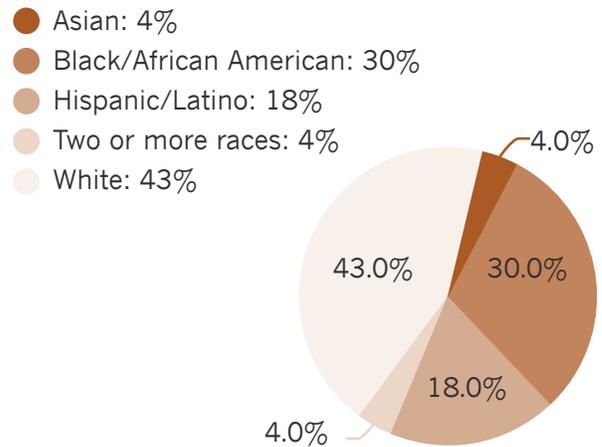
* Average scale scores and percentages at each achievement level. 1 Accommodations were not permitted for this assessment.

Racial and Ethnic Identity

Definition

In all NAEP assessments, data about student race/ethnicity is collected from two sources: school records and student self-reports. Before 2002, NAEP used students' self-report of their race and ethnicity on a background questionnaire as the source of race/ethnicity data. In 2002, it was decided to change the student race/ethnicity variable highlighted in NAEP reports. Starting in 2002, NAEP reports of students' race and ethnicity are based on the school records, with students' self-report used only if school data are missing.⁸

Racial and Ethnic Identity in Delaware, 2019



Key Takeaways

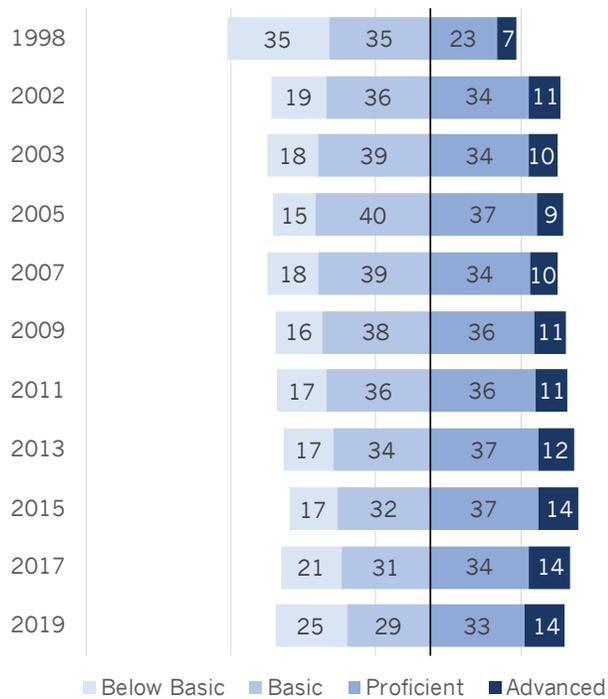
- The proficiency rates for **Black/African American, Hispanic, and White students (the three largest demographics in Delaware)** have remained relatively unchanged.
- The achievement disparity between **White students and Black/African American and Hispanic students is large and unchanging.**

Delaware in Context, by Racial and Ethnic Identity

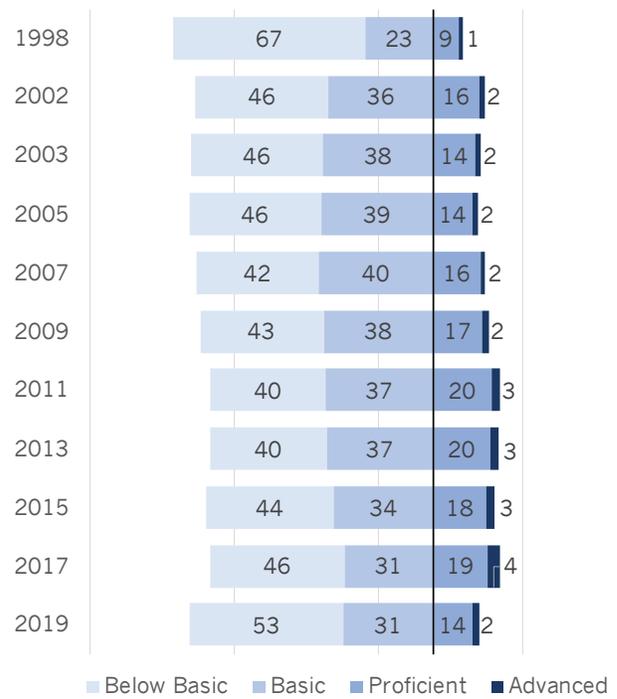
	Year	Low-Income Status	Delaware	National	Mid-Atlantic States
4th Grade Reading	2003	Black/African American	221	198	197
		Hispanic	209	200	205
		White	233	229	231
	2019	Black/African American	203	204	205
		Hispanic	209	209	207
		White	230	230	235
8th Grade Math	2003	Black/African American	260	252	259
		Hispanic	257	259	252
		White	287	288	289
	2019	Black/African American	260	260	260
		Hispanic	266	268	262
		White	289	292	299

Delaware NAEP Scores, by Racial and Ethnic Identity*

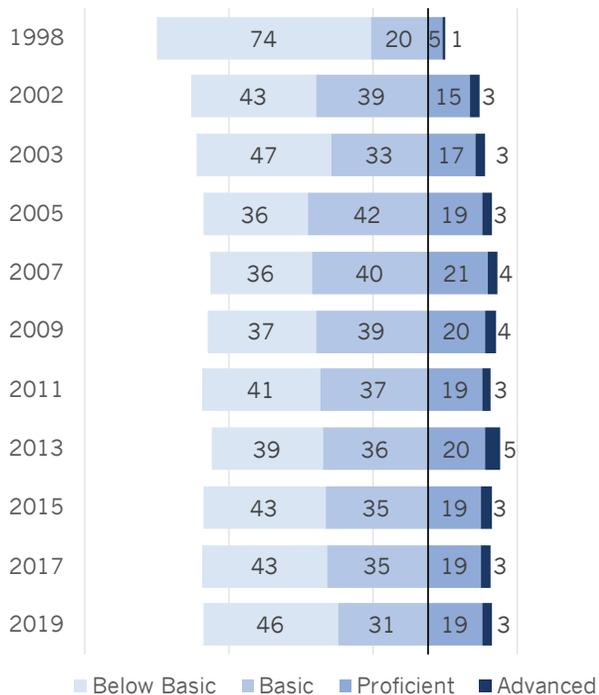
4th Grade Reading
Race: White Students



4th Grade Reading
Race: Black Students



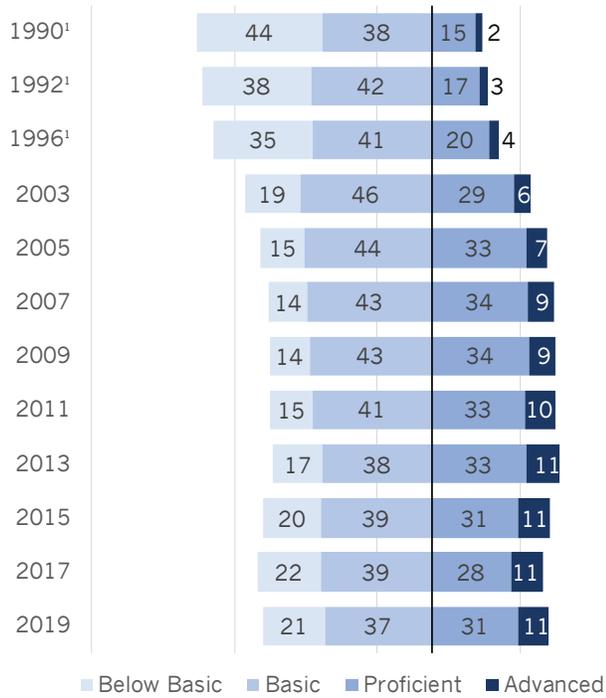
4th Grade Reading
Race: Hispanic Students



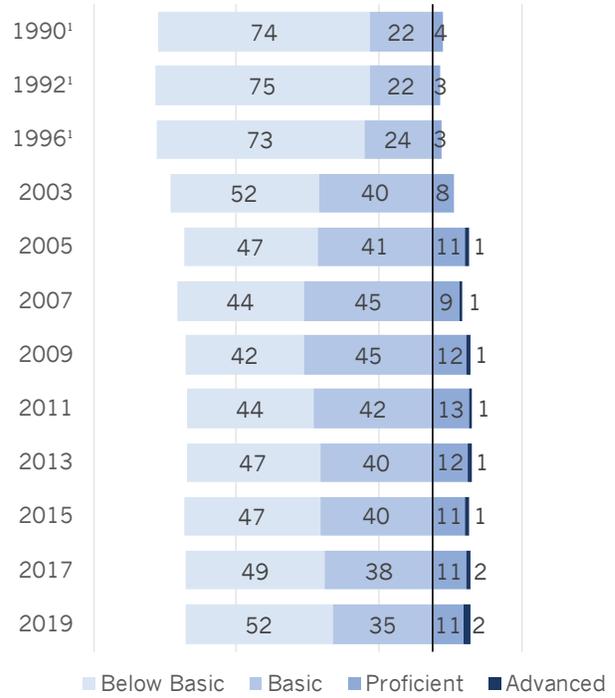
* Average scale scores and percentages at each achievement level

Delaware NAEP Scores, by Racial and Ethnic Identity*

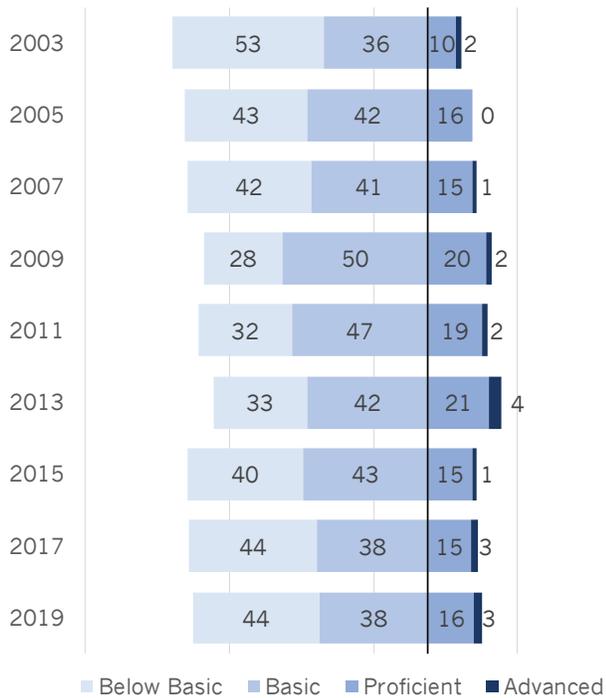
8th Grade Math
Race: White Students



8th Grade Math
Race: Black Students



8th Grade Math
Race: Hispanic Students[^]



* Average scale scores and percentages at each achievement level. 1 Accommodations were not permitted for this assessment.

[^]Note: Soonest available data for Hispanic students is for 2003.

End Notes

1. The National Assessment of Educational Progress (NAEP) is the largest nationally representative and continuing assessment of what America's students know and can do in various subject areas. Each year NAEP selects a representative sample of schools and students from across the country to participate in a standardized assessment of learning. NAEP test score data are nationally representative, comparable across states, and allow for assessing trends over time. Source: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), Reading and Math Assessments. Data obtained and statistical significance tests estimated via NAEP Data Explorer.
2. National Center for Education Statistics. (2016, January 8). NAEP Technical Documentation: Achievement Levels. https://nces.ed.gov/nationsreportcard/tdw/analysis/describing_achiev.asp
3. The Mid-Atlantic region is defined as including the following states: Delaware, Maryland, Pennsylvania, and New Jersey. This definition of the Mid-Atlantic region is consistent with the U.S. Department of Education's Institute for Education Science's Regional Educational Laboratory Program (REL Mid-Atlantic). <https://ies.ed.gov/ncee/edlabs/regions/midatlantic/>
4. Accommodations in the testing environment or administration procedures are available for students with disabilities to support their participation in the assessment. Some accommodations are actually built-in features—or Universal Design Elements—of the digitally based assessments that are available to all students. Other accommodations, such as additional test time, are available upon request. Every jurisdiction decides what accommodations the students in that jurisdiction are eligible to receive. Prior to 1996, NAEP did not allow accommodations for students with disabilities, so test scores and achievement levels for these early years include an indicator noting that accommodations were not permitted for this assessment.
5. All composition data was retrieved from the Delaware Department of Education Data Set, 2018–2019.
6. Accommodations in the testing environment or administration procedures are available for English learner students to support their participation in the assessment. Some accommodations are actually built-in features—or Universal Design Elements—of the digitally based assessments that are available to all students. Other accommodations, such as additional test time, are available upon request. Every jurisdiction decides what accommodations the students in that jurisdiction are eligible to receive. Prior to 1996, NAEP did not allow accommodations for English learner students, so test scores and achievement levels for these early years include an indicator noting that accommodations were not permitted for this assessment.
7. Because NAEP student information is based on available school records, the definition of low-income changed due to a change in federal policy that allowed for a change in the low-income definition used by Delaware's Department of Education. Prior to the 2011 school year, low-income status was based on eligibility for the free and reduced-price lunches, which was determined by students' family income in relation to the federally established poverty level. Students whose family income is at or below 130 percent of the poverty level qualify to receive free lunch, and students whose family income is between 130 percent and 185 percent of the poverty level qualify to receive reduced-price lunch.

As a result of the passage of the Healthy, Hunger-Free Kids Act of 2010, schools can use a new universal meal service option, the “Community Eligibility Provision” (CEP). Through

CEP, eligible schools can provide meal service to all students at no charge, regardless of economic status and without the need to collect eligibility data through household applications. Community Eligibility (CEP) schools use only “direct certification” data, such as data from the Supplemental Nutrition Assistance Program (SNAP) or Temporary Assistance for Needy Families (TANF) program to determine the Federal cash reimbursement for school lunches provided under USDA. They do not administer or collect the meal benefit eligibility form.

In Delaware from 2011–2013, low-income is determined by students who receive any one of the following benefits: TANF, SNAP, Medicaid or free or reduced lunch. Beginning in 2013–2014, low-income status is determined by students who receive any one of the following benefits: TANF, SNAP (Direct Certification).

8. In order to allow comparisons across years, assessment results presented are based on information for six mutually exclusive racial/ethnic categories: White, Black, Hispanic, Asian/Pacific Islander, American Indian (including Alaska Native), and Other. Students who identified with more than one of the first five categories or had a background other than the ones listed were categorized as Other.

Prior to 2011, student race/ethnicity was obtained from school records and reported for the six mutually exclusive categories shown below: White, Black, Hispanic, Asian/Pacific Islander, American Indian/Alaska Native, and Other or unclassified. Students who identified with more than one of the other five categories were classified as “other” and were included as part of the “unclassified” category along with students who had a background other than the ones listed or whose race/ethnicity could not be determined. In compliance with new standards from the U.S. Office of Management and Budget for collecting and reporting data on race/ethnicity, additional information was collected beginning in 2011 so that results could be reported separately for Asian students, Native Hawaiian/Other Pacific Islander students, and students identifying with two or more races. Beginning in 2011, all of the students participating in NAEP were identified by school reports as one of the seven racial/ethnic categories: White, Black or African American, Hispanic, Asian, Native Hawaiian or other Pacific Islander, American Indian or Alaska Native, and Two or More Races. Students identified as Hispanic were classified as Hispanic in subsequent years even if they were also identified with another racial/ethnic group. Students who

identified with two or more of the other racial/ethnic groups (e.g., White and Black) would have been classified as “other” and reported as part of the “unclassified” category prior to 2011, but from 2011 on were classified as “Two or More Races.” When comparing the results for racial/ethnic groups from 2011, 2013, 2015, 2017, and 2019 to earlier assessment years, the data for Asian and Native Hawaiian/Other Pacific Islander students were combined into a single Asian/Pacific Islander category.

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Prepared by
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In Partnership with
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KIDS COUNT in Delaware

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